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ABSTRACT

This digest discusses exercise adherence, noting its vital role in maximizing the benefits associated with physical activity. Information is presented on the following: (1) factors that influence adherence to self-monitored programs of regular exercise (childhood eating habits, and psychological, physical, social, and situational factors); (2) theoretical models of exercise adherence (psychobiologic screening model, locus of control, and adherence as a process); and (3) strategies for behavior change (self-control strategies, relapse prevention, and motivational strategies). Applying this knowledge to individual situations can assist in developing and maintaining the habits associated with a healthy lifestyle. (SM)

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Exercise Adherence

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Introduction

The physical, psychological, emotional, and social benefits associated with physical activity at all age levels are well documented (Seefeldt, 1986). Nonetheless, statistics from several studies on exercise adherence indicate that approximately 50 percent of the individuals who start a self-monitored exercise program will drop out of that program within six months (Dishman, in press).

This ERIC Digest focusses on (1) factors that influence adherence to self-monitored programs of regular exercise, (2) theoretical models of exercise adherence, and (3) strategies for behavior change.

Variables Influencing Exercise Adherence

- *Childhood Exercise Habits*

Studies suggest that exercise habits in adulthood are often established in childhood. Exercise programs in schools can be effective in improving fitness levels and increasing participation in health-related activities in children. However, it appears that a major opportunity to favorably influence patterns of exercise adherence is being missed in school systems. According to Seefeldt (1986), students who participate in quality physical education programs of sufficient length can increase levels of fitness and acquire the necessary knowledges and enjoyment levels essential to impact future patterns of adherence to exercise programs. Unfortunately, most schools do not offer students enough contact hours in programs of quality, so the impact on future exercise behavior does not occur. As adults, these individuals often initiate and attempt to continue exercise programs without the benefit of having acquired the necessary skills in childhood.

- *Psychological, Physical, Social, and Situational Factors*

Initial interest in an exercise program is often related to a desire to obtain health/fitness benefits. Initial reasons for being involved in exercise programs are often not the same as reasons for remaining with that exercise program. Continued involvement seems to be dependent on a variety of psychological, physical, social, and situational factors.

Of the psychological factors that combine to affect the individual's tendency to maintain an exercise program, perhaps the most significant is self-motivation. Individuals who are highly self-motivated are inclined to adhere to self-monitored exercise programs longer than those who are not highly self-motivated. Attitude toward physical activity in general, interest in a specific activity, and self-confidence in the ability to maintain an activity program are also important to long-term involvement. There are physical measures that, when combined with motivational assessments, predict exercise adherence levels in most populations better than either psychological or physiological factors when observed alone. Body weight and composition, fitness levels, and injuries all affect the individual's adherence to exercise programs. The person who is slim, fit, and injury-free is more likely to adhere to an exercise program than the unfit, overweight, injury-prone individual. In addition, if the exercise program is begun at a very high intensity level, the program dropout rate is very high.

Finally, there are a number of social and situational factors that influence exercise adherence, including convenience and social support. Convenience of exercise facilities or opportunities facilitates persistence with the activity. Receiving support from the individual with whom the exerciser relates most directly also influences the exerciser's persistence with the activity.

Theoretical Models of Exercise Adherence

Developing an understanding of the factors associated with exercise participation is an important challenge to undertake. This understanding can allow exercise programs to be individualized so that exercise adherence is maximized. There are several psychological models that are applicable to the study of exercise adherence. Three are briefly described below:

- *Psychobiologic Screening Model*

This model proposes that body weight, percent body fat, and level of self-motivation serve as predictors for an individual's likelihood to adhere to an exercise program.

- *Locus of Control*

This model suggests that people are either internal controllers who believe that they can control the outcomes in their lives, or external controllers who believe that their destinies are controlled by chance or by others.

- *Adherence As a Process*

This model focuses on the idea that adherence is an ongoing process. It suggests that the behavior of people changes in sequences instead of all at once.

An examination of each of these models should assist in developing an understanding of the processes leading to adherence.

Strategies for Behavior Change

Acquiring the habit of maintaining an exercise program is a process with three stages: the decision to start exercising, the

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early stages of behavior change, and actually maintaining the new behaviors. There are a variety of strategies that assist in maintaining the initiated exercise program.

• *Self-Control Strategies*

If the individual attributes success in maintaining an exercise program to external factors (e.g., the instructor, the exercise class), then the program will be difficult to maintain if the external factors are removed. One strategy for dealing with this dilemma is to teach the individual self-control strategies such as self-monitoring, goal setting, and self-reinforcement. Individuals who learn self-control strategies seem to be less dependent on external programs and more capable of arranging for new support mechanisms when old ones no longer exist.

• *Relapse Prevention*

Relapse prevention involves identifying, defining, and predicting the high-risk situations (e.g. having to exercise at a non-preferred time, final exam week for college students) that might influence an individual's decision to discontinue an exercise program. Once these steps are completed, learning how to prevent and cope with urges to discontinue the program can be devised. These strategies typically include anticipating the problem and thought stoppage to interrupt the negative message.

• *Motivational Strategies*

Motivation is a critical factor in both program effectiveness and exercise adherence. Motivational strategies that have proven effective include the following:

- Initiate a moderate exercise prescription in order to minimize injuries.
- Encourage group participation. The social reinforcement and camaraderie may facilitate increased exercise adherence.
- Emphasize variety and enjoyment in the activity program.
- Incorporate personal goal setting, periodic testing, and progress charts to demonstrate and document exercise achievements.
- Recognize individual accomplishments through a system of rewards.
- Provide qualified and enthusiastic teachers/leaders.

Conclusion

Exercise adherence plays a vital role in maximizing the benefits associated with physical activity. Understanding the variables that influence exercise adherence, theoretical models of exercise adherence and strategies for behavior change, and applying this knowledge to individual situations can assist in developing and maintaining the habits associated with a healthy lifestyle.

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References identified with an EJ or ED number have been abstracted and are in the ERIC database. Journal articles (EJ) should be available at most research libraries. Documents (ED) are available in ERIC microfiche collections at more than 700 locations. Documents can also be ordered through the ERIC Document Reproduction Service: (800) 443-3742. For more information, contact the ERIC Clearinghouse on Teacher Education, One Dupont Circle, NW, Suite 610, Washington, DC, 20036, (202) 293-2450.

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